No. 616,733.

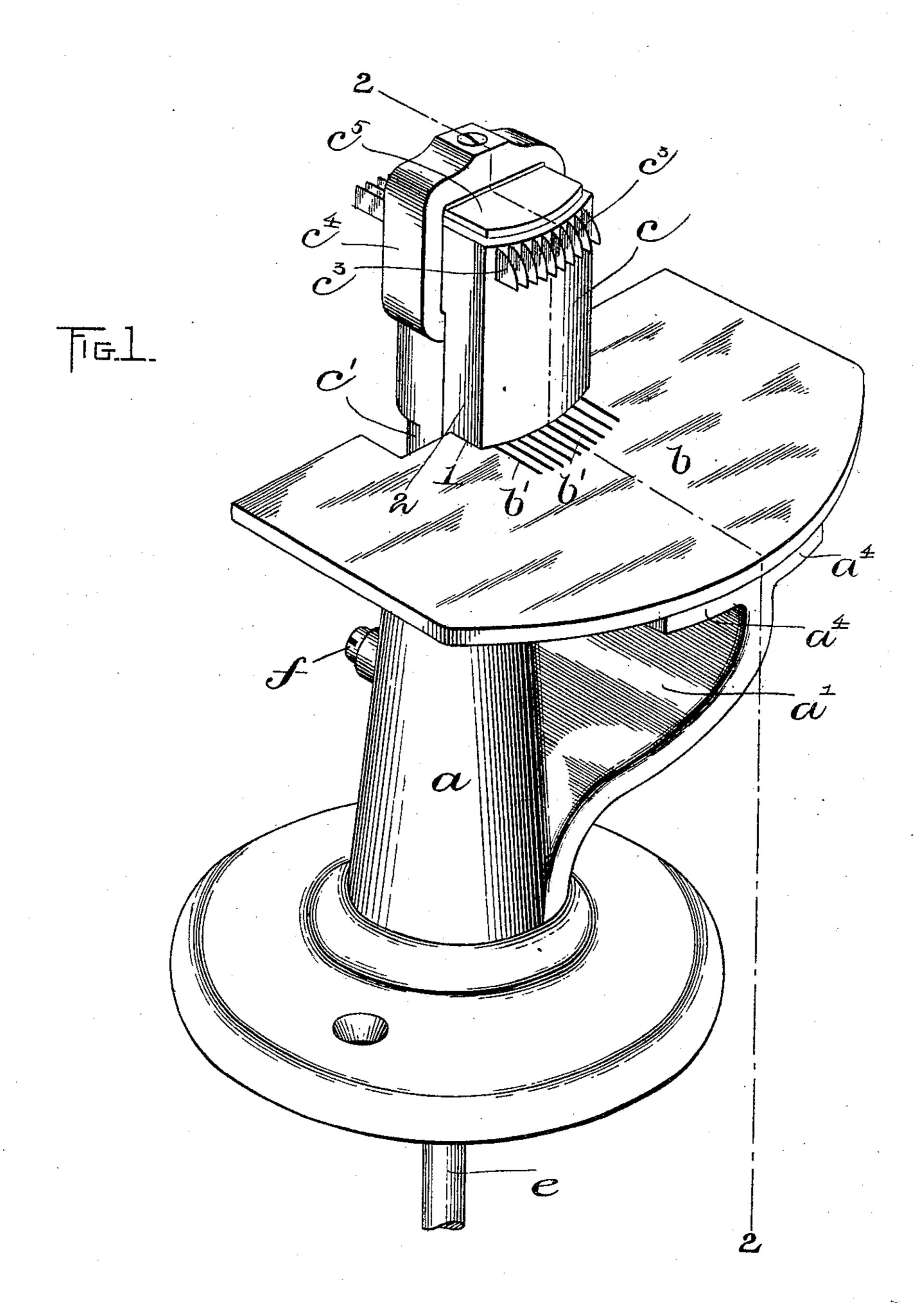
Patented Dec. 27, 1898.

C. C. ROGERS. LEATHER SNIPPING MACHINE.

(Application filed Oct. 21, 1897.)

(No Model.)

2 Sheets—Sheet 1.



WITNESSES! A.D. Hamion P. W. Cezzett.

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C. C. Rogers

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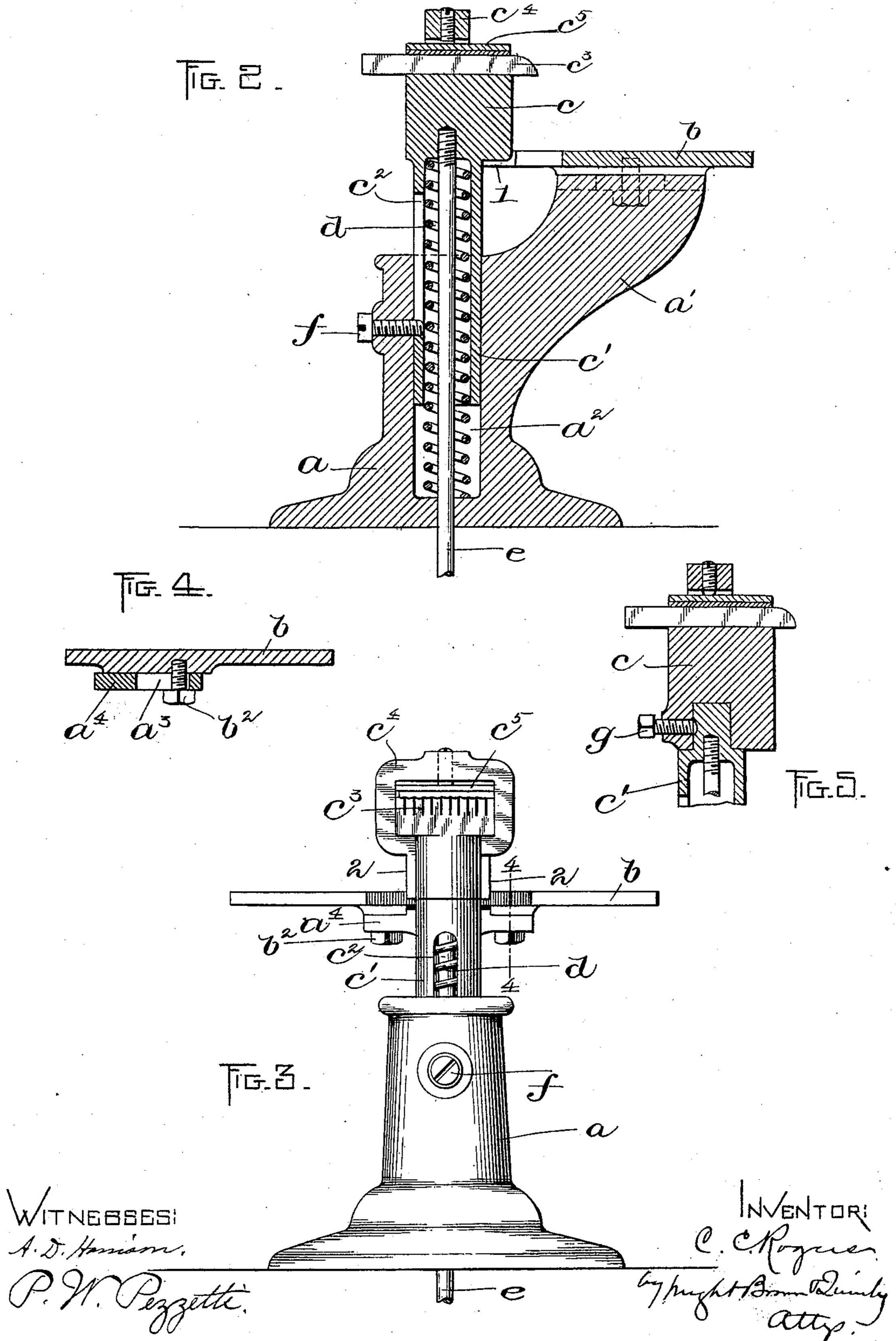
C. C. ROGERS.

LEATHER SNIPPING MACHINE.

(Application filed Oct. 21, 1897.)

· (No Model.)

2 Sheets—Sheet 2.



United States Patent Office.

CHARLES C. ROGERS, OF BROCKTON, MASSACHUSETTS, ASSIGNOR TO THE BROCKTON FOLDING MACHINE COMPANY, OF SAME PLACE.

LEATHER-SNIPPING MACHINE.

SPECIFICATION forming part of Letters Patent No. 616,733, dated December 27, 1898.

Application filed October 21, 1897. Serial No. 655,927. (No model.)

To all whom it may concern:

Be it known that I, CHARLES C. ROGERS, of Brockton, in the county of Plymouth and State of Massachusetts, have invented certain new and useful Improvements in Leather-Snipping Machines, of which the following is a specification.

This invention relates to certain improvements in leather-snipping machines of the character described in United States Letters Patent No. 572,352, granted December 1, 1896, in which a gang of knives is caused to operate on the edge of a piece of leather to slit the same.

The object of the present invention is to simplify the construction of the machine therein described and also to introduce certain novel features in addition to those therein shown.

Of the accompanying drawings, forming part of this specification, Figure 1 represents a perspective view of a leather-snipping machine embodying my improvements. Fig. 2 represents a section on line 2 2 of Fig. 1.

Fig. 3 represents a rear elevation of the machine. Fig. 4 represents a section on line 4 4 of Fig. 3. Fig. 5 represents a sectional view showing a modification.

The same letters and numerals of reference indicate the same parts in all the figures.

Referring to the drawings, the letter a designates a base or standard on which is formed a bracket a', which carries a work-supporting table b. The table b is adapted to support a pile of shoe-uppers or the like in a position to have their edges slit by the knives with which the machine is equipped.

c designates the knife-carrier, which is mounted to move vertically at right angles to the table b and has a downwardly-projecting hollow cylindrical shank c', which fits and slides in a cylindrical socket a² of the standard a. The carrier c is normally held in a raised position by means of a spiral spring d, contained in the socket a² and the hollow portion of the shank c', and is supplied with a treadle-rod e and a treadle, (not shown,) by means of which it may be depressed by the operator. The upward motion of the knife-socarrier is limited by a stop consisting of a

screw f, which screws through the wall of the standard a and extends into an elongated vertical slot c^2 , formed in the shank c', the lower wall of the slot abutting against the screw when the carrier is in its highest position.

The carrier c is supplied with a gang of slitting-knives c^3 c^3 , which project from one edge of the carrier and are arranged to form slits in the reëntrant curve of the shoe-upper when the carrier is depressed from the position shown in Figs. 1, 2, and 3, the knives moving downwardly across the edges of the pile of pieces which are presented and forming a corresponding number of slits therein, the depth of the slits depending upon the projection of the knives from the carrier. The knives are securely fixed in transverse slots in the carrier by means of a suitable clamping-frame c^4 and a clamping-plate c^5 , which bind the back edges of the blades, as shown.

The front face of the carrier c is curved to fit the reëntrant curve of the shoe-uppers, and the table b abuts closely against the cutterface in a corresponding reverse curve, as shown. This abutting edge of the table has 75 a number of receding narrow slots corresponding to the number of knives, into which the projecting ends of the said knives are adapted to enter when the carrier is depressed, and the said table is further formed 80 with guiding-abutments 1, adapted to fit closely against guide-faces 2 of the knife-carrier and to act as guides to keep the said carrier in its proper vertical alinement. The downward motion of the carrier is limited by 85 the lower extremity of the carrier-shank c'striking against the bottom of the socket a^2 .

The table b is rendered adjustable and removable by providing the same on its under side with screw-bolts b^2 b^2 , which extend 90 through slots a^3 , formed in horizontal ears a^4 of the bracket a', and serve to bind the said table to the said bracket. It will be understood that this removable work-table is an important improvement in a leather-snipping 95 machine, because it adapts the machine for use with different sizes of shoe-uppers by changing the table and the knife-carrier. Certain sizes of shoe-uppers, such as uppers for children's shoes, have a sharper or more 100

abrupt reëntrant curve than the larger sizes, and ordinarily it would require a separate machine to treat this smaller size; but by means of my improved machine the same 5 supporting-base may be used with any number of differently-curved knife-carriers and work-tables. It is a simple matter to provide a separable treadle-rod e, to remove the knife-carrier by loosening the stop-screw f, 10 and to insert another knife-carrier which will correspond with a differently-shaped table. It would also be possible to make a portion of the knife-carrier removable by separately attaching the head to the shank, as I 15 have shown in Fig. 5, where a set-screw g is used to hold the carrier c to the shank c'.

According to the foregoing description it will be seen that I have greatly simplified the construction of a leather-snipping machine, rendered the same compact, reduced the number of parts, cheapened the construction, and provided important novel features.

I claim—

1. A machine of the character specified, comprising a base, a reciprocatory knife-carrier mounted thereon, and carrying a gang of knives having their cutting edges projecting laterally from the carrier so as to cut a series of lateral slits along the edge of the work, a work-supporting table having an edge shaped to correspond to the edge of the work and removably secured to the base, and means for adjusting said table laterally toward and from the knife-carrier, for the purpose specified.

2. A machine of the character specified comprising a standard, a table-supporting bracket formed on said standard, a work-supporting table removably secured to said to bracket, a knife-carrier adapted to move vertically across the edge of said table, and a stop to limit the upward movement of the carrier, the said stop being arranged in such

relation to the carrier that the retraction of the stop permits of the removal of the knife-45

carrier.

3. A machine of the character specified, comprising a standard, a knife-carrier movable vertically in said standard, a coiled spring adapted to maintain the carrier in a 50 normally-raised position, a gang of knives fixed to the upper portion of said carrier and having their cutting ends projecting therefrom, a work-supporting table mounted on the standard, the said table having guides 55 abutting against guiding-faces of the carrier and having slots adapted to receive the ends of the knives, and means for depressing the said carrier against the tension of the said spring.

4. A machine of the character specified, comprising a base or standard, a reciprocatory knife-actuating mechanism, including a removable knife-supporting part which has a guiding-face shaped to conform to the edge 65 of the material to be operated on, and a work-supporting table correspondingly shaped and

removably secured to the base.

5. A machine of the character specified, comprising a vertically-movable knife-car-70 rier having a face shaped to conform to the edge of the material to be operated on, a gang of slitting-knives mounted in said carrier, and a work-supporting table having an edge abutting the carrier-face and shaped to correspond 75 thereto, the said table being formed with slots in said edge, adapted to be entered by the slitting-knives.

In testimony whereof I have signed my name to this specification, in the presence of 80 two subscribing witnesses, this 19th day of

October, A. D. 1897.

CHARLES C. ROGERS.

Witnesses:

A. D. HARRISON, C. C. STECHER.